



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/774,561      | 02/09/2004  | Vincent Park         | 060568U3            | 1112             |

23696 7590 01/03/2012  
QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

|          |
|----------|
| EXAMINER |
|----------|

DANIEL JR, WILLIE J

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2617

|                   |               |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

01/03/2012

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

|  |  |                                    |
|--|--|------------------------------------|
| <p align="center"><b>Advisory Action</b><br/><b>Before the Filing of an Appeal Brief</b></p> | <b>Application No.</b><br>10/774,561   | <b>Applicant(s)</b><br>PARK ET AL. |
|  | <b>Examiner</b><br>WILLIE J. DANIEL JR | <b>Art Unit</b><br>2617            |

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 October 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: NONE.  
Claim(s) objected to: NONE.  
Claim(s) rejected: 58-63,65-74,76-85,87-96,98-105 and 107-119.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement(s)*. (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

|   |  |
|---|--|
| /WILLIE J DANIEL JR/<br>Primary Examiner, Art Unit 2617 |  |
|---|--|

Continuation of 3. NOTE:

1. The newly added claim 120 "...the level or quality of service....." would require further search and consideration.

Continuation of 11. does NOT place the application in condition for allowance because:

1. Applicant's arguments filed 21 October 2011 have been fully considered but they are not persuasive. The Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the comments in this section and Final Action mailed on 29 August 2011).
2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding applicant's argument of claim 58 in the par. bridging pgs. 17-18, "...no teaching...paging requirements determination module that is configured to receive and analyze paging information to determine a level of quality of service...a paging requirements determination module that is configured to allocate paging resources and generating the corresponding paging message in accordance with the level of quality of service...", the Examiner respectfully disagrees. Applicant has failed to interpret and appreciate the combined teachings of well-known prior art Sanmugam and Miah that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Sanmugam discloses the language as related to the claimed feature(s)

wherein the paging requirements determination module (e.g., 256) is configured to receive and analyze paging information to determine a level of quality of service (e.g., class of service or priority) for a corresponding paging message (e.g., page requests) { (see col. 5, lines 40-45; col. 4, line 66 - col. 5, line 13; col. 13, lines 1-32; col. 7, lines 8-15; col. 8, line 1-9; col. 9, line 2; Figs. 9, 1, 8A-B), where page requests are based on paging information such as class of service, paging parameters, paging field, paging characteristics, and paging extent. In addition, paging orders are transmitted towards the base station (e.g., 256) and places the page message(s) in buffers of the base stations in which the page message(s) are transmitted according to paging priorities (see col. 12, lines 29-40), where the base station (e.g., 256) determines what the paging priorities are in order to allocate resources to distribute the paging messages appropriately. },

wherein the paging resource control module (e.g., 256) is configured to allocate paging resources and generate the corresponding paging message in accordance with the level of quality of service (e.g., class of service or priority) determined by the paging requirements determination module { (see col. 5, lines 40-45; col. 10, lines 53-56; col. 13, lines 1-32; col. 7, lines 8-15; col. 8, line 1-9; Figs. 9, 1, 8A-B), where a base station provides allocates resources to a mobile station (M1) (see col. 4, line 64 - col. 5, line 13) and where paging orders are transmitted towards the base station (e.g., 256) and places the page message(s) in buffers of the base stations in which the page message(s) are transmitted according to paging priorities (see col. 12, lines 29-40; col. 8, line 45 - col. 9, line 4), where the base station (e.g., 256) determines what the paging priorities are in order to allocate resources to distribute the paging messages appropriately. }.

As further support in the same field of endeavor, Miah discloses the language as related to the claimed feature(s) level of quality of service (e.g., an indicator of type or priority) { (see col. 2, [0012 or lines 12-23]), where communication is provided by a packet radio system exchanging data or paging signals and the radio access network reads the header (e.g., an indicator of type or priority) of a paging message to schedule or prioritize for transmitting to a mobile phone (2). In addition, Miah at the least further the feature(s) discloses

a system for distributed packet-based paging, comprising: a plurality of access nodes (e.g., radio access network with RNC 12, node B 16, and transmitter/receiver 20) configured to exchange paging messages (see col. 1, [0007]; col. 2, [0015] - col. 3, [0017]), where the mobile station (2) is sent a paging message;

wherein the paging requirements determination module (e.g., radio access network combination of RNC 12, node B 16, and transmitter/receiver 20) is configured to receive and analyze paging information to determine a level of quality of service (e.g., an indicator of type or priority) for a corresponding paging message (see col. 2, [0012 or lines 12-23]);

wherein the paging resource control module (e.g., radio access network combination of RNC 12, node B 16, and transmitter/receiver 20) is configured to allocate paging resources and generate the corresponding paging message in accordance with the level of quality of service (e.g., an indicator of type or priority) determined by the paging requirements determination module (see col. 2, [0012 or lines 12-29; 0015 or lines 53-57]; col. 1, [0006]). Therefore, the combination(s) of the reference(s) Sanmugam and Miah as addressed above more than adequately meets the claim limitations.

3. Regarding applicant's argument of claim 110 on pg. 20, 1st full par., "...exchanging paging information between a plurality of access nodes...determining the level of quality of service at least in part (i) from analyzing at least one of a header field or a payload field, using a packet classification technique, from a received data message and (ii) from stored information uniquely associated with the access node in which the paging requirements determination module resides...does not teach...", the Examiner respectfully disagrees. Applicant has failed to interpret and appreciate the combined teachings of well-known prior art Sanmugam and Miah that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Sanmugam discloses the language as related to the claimed feature(s)

wherein the access node (e.g., BS 256) is configured to exchange paging information with a second access node in the system for distributed packet-based paging, the plurality of access nodes serving a plurality of end nodes (e.g., mobile station M1), and to serve at least end node (see col. 4, line 56 - col. 5, line 45; Figs. 1 & 9), and

wherein the paging requirements determination module is further configured to determine the level of quality of service (QoS) (e.g., class of service or priority) at least in part (i) from analyzing at least one of a header field or a payload field, using a packet classification technique (e.g., class of service or priority), from a data message (e.g., page requests) received and (ii) from stored information uniquely

associated with the access node (e.g., BS 256) in which the paging requirements determination module resides { (see col. 5, lines 40-45; col. 4, line 66 - col. 5, line 13; col. 13, lines 1-32; col. 7, lines 8-15; col. 8, line 1-9; col. 9, line 2; Figs. 9, 1, 8A-B), where page requests are based on paging information such as class of service, paging parameters, paging field, paging characteristics, and paging extent in which a header field would be implicit due to paging information of the paging requests as evidenced by the fact that one of ordinary skill in the art would clearly recognize. In addition, paging orders are transmitted towards the base station (e.g., 256) and places the page message(s) in buffers of the base stations in which the page message(s) are transmitted according to paging priorities (see col. 12, lines 29-40), where the base station (e.g., 256) determines what the paging priorities are in order to allocate resources to distribute the paging messages appropriately. } .

As further support in the same field of endeavor, Miah discloses the language as related to the claimed feature(s) at least one of a header field or a payload field (see col. 2, [0012]; Fig. 1), where the radio access network reads the header (e.g., an indicator of type or priority) of a paging message to schedule or prioritize for transmitting to a mobile phone (2). As further support, Miah at the least discloses the feature(s) level of quality of service (e.g., an indicator of type or priority) (see col. 2, [0012 or lines 12-23]), where communication is provided by a packet radio system exchanging data or paging signals and the radio access network reads the header (e.g., an indicator of type or priority) of a paging message to schedule or prioritize for transmitting to a mobile phone (2); and wherein the access node (e.g., radio access network combination of RNC 12, node B 16, and transmitter/receiver 20) is configured to exchange paging information with a second access node (e.g., radio access network combination of RNC 12, node B 16, and transmitter/receiver 20) in the system for distributed packet-based paging, the plurality of access nodes serving a plurality of end nodes (e.g., mobile phone 2) (see col. 2, [0012 or lines 12-29; 0015 or lines 53-57]), where the radio access networks are interlinked for communication exchange (see col. 1, [0007]; col. 2, [0015] - col. 3, [0017]). Therefore, the combination(s) of the reference(s) Sanmugam and Miah as addressed above more than adequately meets the claim limitations.

4. Regarding applicant's argument(s) of claims 59-63, 65-74, 76-85, 87-96, 98-105, and 107-119, the claims are addressed for the same reasons as set forth above and as applied above in each claim rejection.